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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,787	08/29/2001	Henry Scanzano	9209-12	9756

20792 7590 04/21/2004

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EXAMINER	
CHEN, TE Y	

ART UNIT	PAPER NUMBER
2171	7

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/942,787	SCANZANO ET AL.	
	Examiner	Art Unit	
	Susan Y Chen	2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

This office action is in response to the amendment filed on 02/27/2004.

Claims 1-48 are pending for examination, claims 1 and 36 have been amended.

Specification

The amended specification has been noted and filed on record.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 and 36 are rejected under 35 USC 101, because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological art. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural

phenomena) that do not apply, involve, use, or advance the technological art fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a method claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In Bowman (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (BD. Pat. App. & Inter. 2001) (Unpublished), the board affirmed the rejection under U.S.C. 101 as being directed to non-statutory subject matter. Although Bowman discloses transforming physical media into a chart and physically plotting a point on said chart, the Board held that the claimed invention is nothing more than an abstract idea, which is not tied to any technological art or environment.

In the present case, although claims 1 and 36 both recite an abstract idea at the preamble for providing multiple but exclusive relationship between tables in a relational database, however, the steps in the claim body merely associate a foreign key with a set of related tables base on at least one attribute of the record in the relating table of a database, which can be implemented by the mind of a person or by the use of a pencil and paper. In another words, since the claimed invention, as a whole, is not within the

technological arts as explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus, it is deems to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 36-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 36, 40 and 45, it is not understood what is it meant by "associating a type with respective ones of the plurality of second tables" [i.e., what does the claimed "respective ones of the plurality of second tables" refer to? What type was used to associate the claimed respective ones of a plurality of second tables? And how to associate a type to the claimed respective ones of a plurality of second tables?]

As to claims 37-39, 41-44 and 46-48, these claims have the same defect as their base claims, hence are rejected for the same reason.

Because of the ambiguity nature of the invention, the following rejections are based on the examiner best understanding.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Jorgensen (U.S. Patent No. 5,933,831).

As to claims 12, 14 and 40, Jorgensen discloses a computer system with relational database management processing to provide multiple but exclusive relationships between tables [e.g. see Abstract, Fig(s). 2-4], wherein, the system comprising the followings as claimed by applicant:

a) a relating (or type) table [e.g., table 200, Fig. 2] which have at lest one attribute [e.g. the pop-up menu (226), Fig. 2] to provide a one-to-many relationship between the related table and a corresponding foreign key [e.g., the foreign key Icon(206), Fig. 2; col. 3, lines 56-65 & col. 4, lines 4-6; Fig. 4];

b) a plurality of related tables [e.g., the set of hyperlinked tables being displayed by the step 306, Fig. 3; col. 3, lines 27-32, lines 56-65; col. 4, lines 14-19];

c) means for selectively associating a foreign key value of a record in the relating table with a specific one of related tables based on the attribute of the key [e.g. see the foreign key icon & trigger processing of Fig(s). 3A-3C].

As to claims 13,17-18, 20-23, 41-42 and 44, the claimed limitations are default properties of standard OO SQL processing. [e.g. an ordinary skill person in the art can use the "Create Table" SQL to define foreign key association between a set of tables, he/she also can use the "Create Type" SQL to define a plurality of types of foreign key association. In addition, a user can enforce the multiple and exclusive relationship between a set of tables via QQ SQL UDR (User Defined Routines or triggers). Furthermore, a build-in "Select (value/values) From (table/tables) Where (condition/conditions)" SQL can be used to select and identify (or obtain) records from a set of desired tables of a database].

As to claims 15, 19 and 43, Jorgensen further discloses using trigger to enforce association relationships between the set of foreign keys and related tables in a database [e.g., see Fig. 3C].

As to claim 16, Jorgensen further discloses that the system use a defined type (or hyperlink) to access the typed tables [e.g. see col. 3, lines 27-32].

As to claims 1-11, 24-39 and 45-48, these claims recite the same subject matters as claims 12-23 and 40-44 in form of computer method and computer products. As such, they are rejected for the same reason.

Response to Arguments

Applicant's arguments filed on 02/27/2004 have been fully considered but they are not persuasive.

In response to applicant's arguments under 35 U.S.C. 101 rejection, since the amendments to claims 1 and 36 are not sufficient to overcome the rejection under 35 U.S.C. 101. There is no positive recitation of the claimed body as a whole to breath life and meaning into the preamble. Looking at the claims as a whole, nothing in the body of the claims recite any structure of functionality to suggest that a computer or technological art performs the recited steps. Therefore, the claims are taken to merely recite a field of use that can be implemented by the mind of a person or by the use of a pencil and paper. Thus, the claimed invention, as a whole, is not within the technological arts as explained above, claims 1 and 36 are directed to non-statutory subject matter.

In response to applicant's arguments under the U.S.C. 112 rejections, Although applicant try to interpret the claims in light of Fig.(s) 4A-5A of the instant specification, however, since no specific example of a SQL statement is provided for the claimed type

to ensure that the type will identify the claimed multiple but exclusive relationship, thus, the arguments are not considered as persuasive. Furthermore, it is noted that applicant's arguments include an incomplete conclusion or sentence – "Accordingly, records in Table A may " (see Page 19, line 2) -- which leads the nature of the instant invention more ambiguous, as such, the examiner maintains the same rejections on record.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y Chen whose telephone number is (703) 308-1155. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (703) 308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen
Examiner
Art Unit 2171

April 13, 2004

UYEN LE
PRIMARY EXAMINER